



## MEET OUR AMBASSADORS



### **Hanin Karawani Khoury**

Assistant Professor

Director of the AudioNeuro Lab

Department of Communication Sciences and Disorders

Faculty of Social Welfare and Health Sciences

#### **Field of Research:**

Brain plasticity and auditory processing

#### **SHORT BIO**

I am a clinical audiologist and speech pathologist, received my BSc from the University of Haifa (*summa cum laude*, Wolf foundation award) and entered a direct PhD track to study auditory learning. I completed my post-doctoral research at the University of Maryland (USA) in Neuroscience. I received the prestigious MAOF Fellowship for Excellent Young Scientist from the Council for Higher Education and joined the Faculty of Social Welfare and Health Sciences in 2018. My work as a clinical scientist has led me to pursue a path that has the potential to have important implications for prevention of cognitive function decline in older adults through novel pathways that show that restoration of sensory input improves both cognitive and cortical function suggesting a neural mechanism for the sensory-cognitive connection. Today my lab investigates brain plasticity and auditory processing across the life span using perceptual, cognitive and electrophysiological measures. I am interested in neuroplasticity following altered sensory experience induced by auditory training and hearing rehabilitation, and recently, I have been investigating brain plasticity mechanisms through the experience of bilingualism.

#### **FUNDRAISING NEEDS**

My [AudioNeuro](#) lab investigates brain plasticity and auditory processing across the life span but with a particular interest in older adults, as the population over the age of 60 is predicted to increase to up to two billion people by 2050. Aging can eventually lead to sensory impairments such as age-related hearing loss that is known to accelerate cognitive decline and increase social isolation and depression. Therefore, there is a pressing need to develop methods to address the health needs of this growing population. My core mission is to ensure healthy lives and promote well-being for older adults, an expanding population worldwide. I am working in the lab to build home-based training software for older adults that promotes psychological well-being and healthy lifestyle given the worldwide increased life expectancy, and that can be implemented also in developing countries. This innovative integrated approach was generated based on my insights of developing ways to maximize communication abilities in older adults. Without my excellent students nothing of this can be promoted. **Therefore, there is special need for student fellowship funding & equipment and software funding.**